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Rail Road News.

Accident on the Erie Railroad.

On Wednesday, the 31st ult., while the down freight train was crossing the iron bridge three miles above Lackawaxen, it gave way, precipitating the train into the creek. The train was very heavy, consisting of 20 cars, with 500 sheep, 200 hogs, and 100 head of cattle. Only 25 of the cattle and 100 sheep were saved. Five men were killed—3 brakemen and 2 drivers. When the locomotive came on to the bridge, the engineer felt it settle, when he at once put on more steam, which carried the engine over, but the tender parted, falling down into the ravine, and fifteen of the freight cars tumbled down on the top of it.—The loss is about \$10,000 in property—the lives of the men being above valuation. The bridge was 62 feet long and 25 feet high. Iron bridges should be built with the greatest of care, and after they are built they require to be examined almost every day.

Girard and Mobile Railroad.

The survey of this road has been completed, and the eastern terminus fixed at Girard, Ala., opposite Columbus, Georgia. The length of this road will be 250 miles, and will pass through a very fertile country; the gradients will not exceed 43 feet per mile. The South is going ahead in railroads—they will be the means of drawing out the great natural resources of the Southern States.

Baltimore and Ohio Railroad.

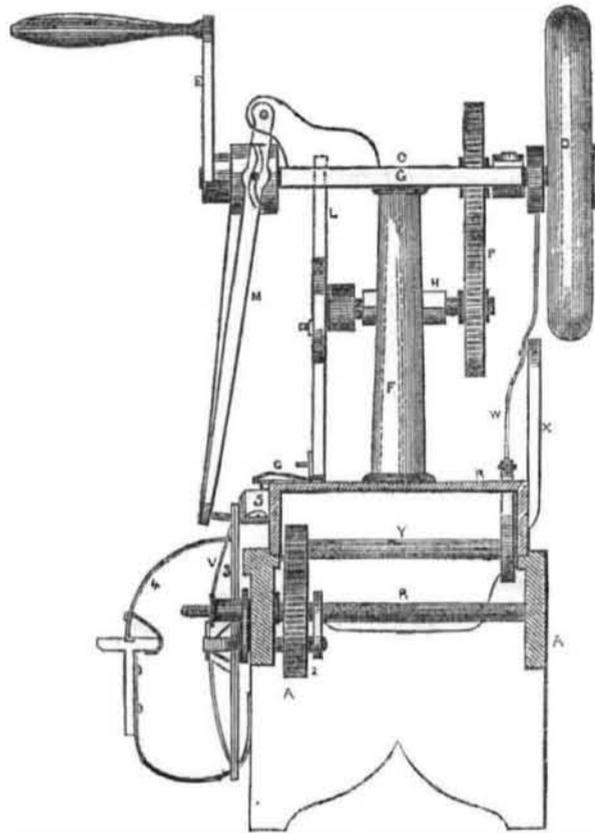
The Wheeling Gazette states the Board of Engineers to decide the questions at issue between that city and the Baltimore and Ohio Railroad company, have completed the reconnaissance of the two routes, and adjourned to West Point to conclude the examination of their minutes.

The Supreme Court of the third judicial district of New York, has decided that an action on the case lies against a railroad company in favor of a church corporation for a nuisance, in running cars and engine, ringing bells, blowing off steam and making other noises in the neighborhood of a church or meeting house, on the Sabbath and during public worship, which so annoy and molest the congregation worshipping there as greatly to depreciate the value of the house and render it unfit for a place of public worship.

The Siamese Twins.

The report that the Siamese twins had died in Europe, significantly contradicted by a letter from their place of residence in North Carolina, announcing that one of their wives has just ushered into the world "another pledge of their union," making the ninth added to census by the Mesdames Chang and Eng. We verily believe these Siamese twins have as many lives as a cat. They have died two or three times already and we don't know but they will have to die as many times more before they give the final kick.

WATSON'S SEWING MACHINE.—Fig. 1.

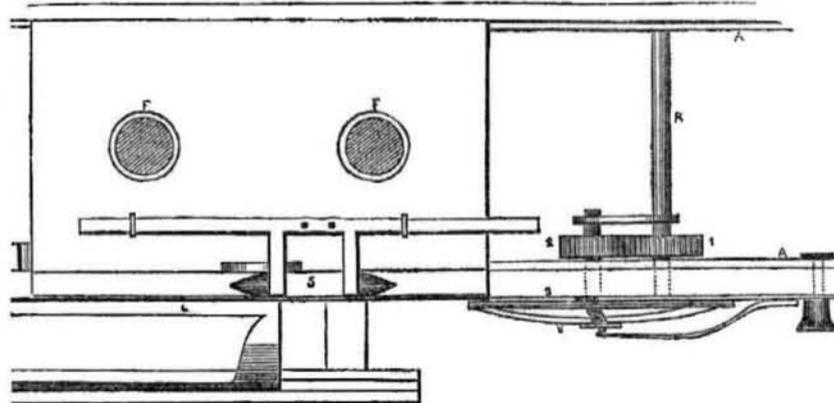


Four different sewing machines have already been published in our columns, and we now present another, which produces work of a very superior character; it is the invention of Mr. William C. Watson, of Paterson, N. J., who has made application for a patent. This machine uses two threads to form the stitch, the one thread by a shuttle and the other by a needle—the motion of the two being regulated to form a lock-stitch, which will not rip out. It produces one stitch during the forward and another during the backward motion of the shuttle. The manner in which the cloth is fed in to sew curved seams, is beautiful.

Figure 1 is a vertical transverse section;

figure 2 is part of a plan view; figure 3 is a detached longitudinal vertical section. The same letters of reference indicate like parts. A is a long table, which supports the machinery; B is the bed plate, smoothed to fit into the table. There are two pillars, F F, to support plates and shafts; G is a top plate, and H is an intermediate one; C is the main shaft, and D is a fly wheel on it. E is a crank handle. There is a cylinder on the main shaft, having an eccentric groove in it (shown by the dotted lines.) This eccentric groove operates the forked arm, M, of the needle, which has pins in it inserted in the groove, which gives an out and in motion to the needle, when the

Figure 2.



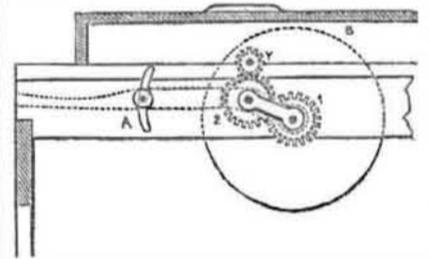
handle, E, is turned. On the other side of the fly-wheel there is a cam for operating the ratchet arm, W, which has a pall on its lower end to take into a ratchet wheel on the spindle below and turn it. P is a pinion on the small horizontal shaft, which is turned by a cog-wheel on the main shaft above. L is a lever which hangs down to vibrate and operate the shuttle bar backwards and forwards. The spool is not seen, but the thread is shown passing behind the needle arm, M. The needle is at the lower end. The shuttle, S, is like a weaver's, and is moved backwards and forwards, as on a loom. The bar on the plate, fig. 2, has two spring fingers embracing the shuttle in its raceway, and there is a pin on the inside of each finger. There are two pins on the bar above the shuttle, between which is embraced the vibrating lever, L, fig. 1, therefore when the said lever is vibrated, the shuttle bar is moved backwards and forwards—once backwards and once forwards, for every two stitches of the needle. The pins on the inside of the fingers must be lifted when the shuttle is passing through the loop, G, fig. 1 (formed by the thread of the needle behind the cloth) and this is done by a projection on the plate, above the shuttle behind the fingers. Each finger is thrown out alternately, so that one holds the shuttle while the other is free, and

thus the shuttle passes through the needle loop, forming the lock stitch. This is the way the shuttle is operated.

The feed motion of the cloth to be sewed is peculiar—two circular plates being employed for that purpose, (the edges of them only are seen in the figures.) R is a spindle which carries a toothed wheel loose upon it, and there is a small spindle with a fast wheel, 2, upon it. The outer end of this small spindle carries the flat round plate, 3, which can be adjusted to different heights, to suit the sewing of large and small garments, &c. V is a circular plate, concave on the inside, and is of the same size as plate 3. The cloth is confined between these two plates, the concavo part allowing for the folds, so that any curved seam may be arranged on the periphery, packing the folds inside, and as these plates revolve, the needle passes through the cloth at the edge, and thus sews circular, or any kind of curved seam. In figures 1 and 3 there is a spindle, Y, with a pinion on it gearing into wheel 2. This spindle has a ratchet wheel on it which is operated by the ratchet arm, W, which is hung on a centre pin on the post, X, and thus motion is given from the main shaft above to the spindles Y and R below, to give the plates 3 and V a rotary motion to feed the cloth to the needle, and this is done at regular stitch distance for every stroke. For sewing straight seams, a different cloth-holder is used, but this needs no explanation, such an arrangement being easily constructed. For sewing curved seams, it will easily be perceived how Mr. Watson has exercised a beautiful ingenuity.

The one round plate being open concave, and the other flat, allows a seam of any curve to be arranged to the action of the needle, and

FIG. 3.



the two plates are then pressed together by a spring on the bow plate, 4, fig. 1, to hold the cloth snugly between the plates.

When the main shaft, C, is revolved, the needle arm is vibrated by the eccentric grooved cylinder, the cam works the ratchet arm, W; the lever, L, gets its vibratory motion likewise from a crank pin on the spindle of the pinion, P, which works in a slot in the lever, and thus the vibratory and rotary motions, to work the needle, shuttle and revolving plates are derived from the main shaft, C, when the crank handle, E, is turned by the operator.

Several of these machines are nearly finished at the American steam works, in this city. Persons desirous of seeing them can be gratified by calling upon Messrs. Jones & Lee at Earle's Hotel, No. 19 City Hall Square.

Glaze for Muslin.

Three pints of old pale linseed oil; sugar of lead, one oz; and white resin four oz. The sugar of lead must be ground with a small quantity of the oil, and, added to the remainder, incorporated with the resin by means of a gentle heat. Lay it on muslin with a brush. One coat annually is sufficient.

Covering for Gravel Walks.

Decomposed sandstone is an excellent covering for walks, in order to bind any loose material of which they may be formed. Soon after its application, the surface becomes perfectly smooth, and almost as firm as a flag.—The walks may be swept during wet weather, nearly as well as when it is dry.